

Correct Authorship and Date Citations for Several Californian Opisthobranch Gastropod Taxa Described in Publications by Cooper and Cockerell

BY

HANS BERTSCH¹

Associate in Invertebrate Zoology, California Academy of Sciences, San Francisco, CA 94118

WITHIN THE PAST 10 YEARS, numerous technical and popular reference books have been published which identify or index various opisthobranch mollusks from the Pacific coast of America (e.g., RUSSELL, 1971; KEEN, 1971; ABBOTT, 1974; SMITH & CARLTON, 1975; ALLEN, 1976; STRAUGHAN & KLINK, 1980; BEHRENS, 1980; and MORRIS, ABBOTT & HADERLIE, 1980). These important works are widely distributed and are used by numerous researchers, students, and others as primary taxonomic sources. However, a close scrutiny of the opisthobranch sections of these books reveals significant discrepancies in authorship and publication dates among those species described in papers written by James Graham Cooper and Theodore Dru Alison Cockerell. Since 22 of these species account for nearly 15% of the currently recognized opisthobranch taxa from the Oregonian and Californian zoogeographic faunal provinces, a proper resolution of these differences may be useful.

Table 1 lists the complete and correct citations (including original page of description) for 31 specific and 4 generic taxa. The arrangement of the first 22 species follows BEHRENS (1980) and CADIEN (*in* STRAUGHAN & KLINK, 1980). Those 9 species marked with an * are either junior synonyms or are considered questionable or unrecognizable by modern workers.

DISCUSSION

Cooper published 3 articles in 1863 in which he described opisthobranch taxa. The species described in the first paper (COOPER, 1863a) have often been cited erroneously as Cooper, 1862. This article appeared in the Proceedings of the California Academy of Natural Sciences for 1862, but its date of publication was January 1863, as printed on page 205 of the issue (see also FERREIRA & BERTSCH, 1975: 327).

The other Cooper articles usually have appeared correctly in bibliographic and taxonomic references.

COCKERELL (1901a) described 2 eolid and 1 dorid nudibranch species in the *Journal of Malacology*. This date usually has been cited correctly. Cockerell submitted a description of 3 species of chromodorids from southern California for publication in *The Nautilus*. This paper was published in June 1902, nearly 7 months after the publication of his article (in the 28 November 1901 issue of the British journal *Nature*) on the pigments of these same 3 nudibranchs. Nomenclatural priority clearly belongs to this paper in *Nature* (COCKERELL, 1901b) because it includes (recognizable) descriptions with proper scientific names. Such an inadvertent publication of new taxa prior to the intended description is reminiscent of the circumstances leading to *Murex hirasei* Hirase, 1915 (cf. RADWIN & D'ARTILIO, 1976: 66). The proper citation for the three species (original genus given for simplicity) *Chromodoris universitatis*, *C. porterae*, and *C. macfarlandi* is Cockerell, 1901.

Taxa described in COCKERELL & ELIOT, 1905, have received the greatest amount of inconsistent references. Reading the text carefully can eliminate these problems. All new taxa in this work require listing as ". . . in Cockerell & Eliot, 1905." On page 31, Eliot writes, "The new specific names are due to him, [i.e., Cockerell] the generic names to me." Throughout the text (with the exception mentioned below) new taxa are indicated solely by "n.sp." Further indication is unnecessary since Eliot's statement unequivocally designates authorship. It should be noted that modern authors rightly prefer to state authorship with the introduction of each new specific name (cf. FARMER *in* FARMER & SLOAN, 1964, and BERTSCH *in* BERTSCH, FERREIRA, FARMER & HAYES, 1973).

The genus *Dirona* and the species *D. picta* and *D. albo-lineata* are clearly and properly attributed to MacFarland, since the authors do not use just manuscript names, but actually present complete quotations from the notebooks of MacFarland describing these taxa. Cockerell & Eliot inserted these quotations as separate entities, not as auxiliary or supportive quotes of another author for their work. This is tantamount to including a section or chapter writ-

¹ Mailing address: P. O. Box 2041, Spring Valley, California 92077

ten by MacFarland. Therefore, just as it is correct to cite LANCE in KEEN, 1971, and McDONALD in SMITH & CARLTON, 1975, for the proper authorship of the respective nudibranch sections in those works, the proper citation for *Dirona*, *D. albolineata* and *D. picta* is MACFARLAND in COCKERELL & ELIOT, 1905.

The abbreviation for authorship of taxa described in Cockerell & Eliot, 1905, is either Cockerell, 1905, Eliot, 1905 (*Phyllobranchopsis*), or MacFarland, 1905. The complete, correct citation, however, is preferable because it is clearer and facilitates bibliographic information retrieval.

ACKNOWLEDGMENTS

I thank Dr. Brian Jennison (Berkeley) and Barbara Myers (San Diego) for help in obtaining references. The research and writing of this article were conducted with the support of Cuyamaca College, California.

Literature Cited

- ABBOTT, ROBERT TUCKER
1974. American seashells. 2nd ed.; 663 pp.; 4000+ figs.; pls. 1-24 (in color). Van Nostrand Reinhold Co., New York
- ALLEN, RICHARD K.
1976. Common intertidal invertebrates of southern California, rev. ed. Peek Publ., Palo Alto, Calif. ix+316 pp.; pls. A-B, 1-41
- BEHRENS, DAVID W.
1980. Pacific coast nudibranchs: a guide to the opisthobranchs of the northeastern Pacific. Sea Challengers, Los Osos, Calif., 112 pp.; 162 text figs. (November 1980)
- BERTSCH, HANS, ANTONIO J. FERREIRA, WESLEY M. FARMER & THOMAS L. HAYES
1973. The genera *Chromodoris* and *Felimida* (Nudibranchia: Chromodorididae) in tropical west America: Distributional data, description of a new species, and scanning electron microscopic studies of radulae. *The Veliger* 15 (4): 287-294; 3 pls.; 3 text figs. (1 April 1973)
- COCKERELL, THEODORE DRU ALISON
1901a. Three new nudibranchs from California. *Journ. Malacology* 8 (3): 85-87 (30 September 1901)
1901b. Pigments of nudibranchiate mollusca. *Nature* 65 (1674): 79-80 (28 November 1901)
1901c. A new *Tethys* from California. *The Nautilus* 15 (8): 90 to 91 (7 December 1901)
1902. Three new species of *Chromodoris*. *The Nautilus* 16 (2): 19-21 (2 June 1902)
1903. Note on *Tritonia palmeri* Cooper, 1882 [sic]. *The Nautilus* 16 (10): 117 (10 February 1903)
1908. Mollusca of La Jolla, California. *The Nautilus* 21 (9): 106-107 (3 January 1908)
1915. The nudibranch genus *Triopha* in California. *Pomona Journ. Entom. Zool.* 7 (4): 228-229; 2 text figs. (December 1915)
- COCKERELL, THEODORE DRU ALISON & CHARLES NORTON EDGEcombe
1905. Notes on a collection of Californian nudibranchs. *Journ. Malacol.* 12 (3): 31-53; pls. 7, 8 (29 September 1905)
- COOPER, JAMES GRAHAM
1863a. Some new genera and species of California Mollusca. *Proc. Calif. Acad. Nat. Sci.* 2: 202-207 (January 1863)
1863b. Remarks. *Proc. Calif. Acad. Nat. Sci.* 3: 8 (April 1863)
1863c. On new or rare Mollusca inhabiting the coast of California. — No. II. *Proc. Calif. Acad. Nat. Sci.* 3: 56-60; fig. 14 (Sept. '63)
- FARMER, WESLEY MERRILL & ALLAN J. SLOAN
1964. A new opisthobranch mollusk from La Jolla, California. *The Veliger* 6 (3): 148-150; pl. 18; 2 text figs. (1 January 1964)
- FERREIRA, ANTONIO J. & HANS BERTSCH
1975. Anatomical and distributional observations of some opisthobranchs from the Panamic faunal province. *The Veliger* 17 (4): 323-330; 3 pls.; 1 text fig. (1 April 1975)
- KEEN, A. MYRA
1971. Sea shells of tropical West America: marine mollusks from Baja California to Peru, 2nd ed. Stanford Univ. Press, Stanford, Calif. i-xiv+1064 pp.; ca. 4000 text figs.; 22 col. pls. (21 September 1971)
- MORRIS, ROBERT H., DONALD P. ABBOTT & EUGENE C. HADERLIE
1980. Intertidal invertebrates of California. Stanford Univ. Press, Stanford, Calif. xiv+690 pp.; 200 color pls.; numerous text figs. (24 November 1980)
- RADWIN, GEORGE EDWARD & ANTHONY D'ATTILIO
1976. Murx shells of the world. An illustrated guide to the Muricidae. Stanford Univ. Press, Stanford, Calif. x+284 pp.; 192 numbered figs. + 6 unnumbered figs. in text; 32 col. pls. (16 December 1976)
- RUSSELL, HENRY DRUMMOND
1971. Index Nudibranchia: a catalog of the literature 1554-1965. Delaware Mus. Nat. Hist. iv+141 pp. (1 July 1971)
- SMITH, RALPH INGRAM & JAMES T. CARLTON, eds.
1975. Light's manual. Intertidal invertebrates of the central California coast. 3rd ed. pp. i-xviii+1-716; illust. Univ. Calif. Press, Berkeley
- STRAUGHAN, DALE & RICHARD W. KLINK
1980. A taxonomic listing of common marine invertebrate species from southern California. Tech. Reprt. Allan Hancock Foundation 3: vi+281 pp. (September 1980)

Table 1

Author and Date Citations (see text for explanation)

- Aglaja inermis* (Cooper, 1863a: 202-203)
Aplysia californica Cooper, 1863c: 57-58
Aplysiopsis enteromorphae (Cockerell in Cockerell & Eliot, 1905: 52-53)
Acanthodoris rhodoceras Cockerell in Cockerell & Eliot, 1905: 38-39
Aldisa sanguinea (Cooper, 1863a: 204)
Archidoris montereyensis (Cooper, 1863a: 204)
Chromodoris macfarlandi Cockerell, 1901b: 79-80
Dendrodoris nigromaculata (Cockerell in Cockerell & Eliot 1905: 40-41)
Diaulula sandiegensis (Cooper, 1863a: 204-205)
Doriopsilla albopunctata (Cooper, 1863c: 58)
Mexichromis porterae (Cockerell, 1901b: 79)
Trapania velox (Cockerell, 1901a: 87)
Triopha catalinae (Cooper, 1863c: 59)
Dendronotus iris Cooper, 1863c: 59
Antiopella barbarensis (Cooper, 1863c: 59-60)
Armina californica (Cooper, 1863a: 203-204)
Dirona albolineata MacFarland in Cockerell & Eliot, 1905: 46
Dirona picta MacFarland in Cockerell & Eliot, 1905: 46-48
Coryphella cooperi Cockerell, 1901a: 85-86
Facelina stearnsi Cockerell, 1901a: 86
Flabellinopsis iodinea (Cooper, 1863a: 205)
Spurilla chromosoma Cockerell in Cockerell & Eliot, 1905: 51-52
Dirona MacFarland in Cockerell & Eliot, 1905: 45-46
Phyllobranchopsis Eliot in Cockerell & Eliot, 1905: 52
Strategus Cooper, 1863a: 202
Navarchus Cooper, 1863b: 8
* *Doris alabastrina* Cooper, 1863a: 204
* *Triopha aurantiaca* Cockerell, 1908: 106-107
* *Janolus coeruleopictus* Cockerell in Cockerell & Eliot, 1905: 48-50
* *Aeolis opalescens* Cooper, 1863a: 205
* *Tritonia palmeri* Cooper, 1863a: 207
* *Doridopsis reticulata* Cockerell in Cockerell & Eliot, 1905: 41-42
* *Tethys Ritteri* Cockerell, 1901c: 90-91
* *Triopha scrippsiana* Cockerell, 1915: 228-229
* *Chromodoris universitatis* Cockerell, 1901b: 79